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18. FURTHER NOTES ON PRESENCE OF FRUITS OF *XANTHIUM INDICUM* KOENIG IN THE NESTS OF *PLOCEUS PHILIPPINUS*

On 21 August 1984 at Tatarpur Mixed Plantation in Alwar district, Rajasthan, I observed a single 'fruit' of *Xanthium indicum* in a completed nest of *Ploceus philippinus*. Its significance remained obscure (Sharma 1988). Subsequently, the whole locality was surveyed but none of the nests in any colony was seen having 'fruits' of *X. indicum* in it. The question of how and why *X. indicum* fruit reached the baya nest remained unresolved.

During 1985 and part of 1986 I was away from Rajasthan and hence could not pursue the study. In July 1986, after returning to Udaipur I selected a baya colony on a medium sized *Phoenix sylvestris* tree near Sitamata Forest Nursery for further study. I tied a twig of *Xathium indicum* with fruits intact, on a date palm to test the affinity of breeding bayas for *Xanthium* fruits. Observations were made for two weeks but neither male nor female birds showed any interest in the fruits. The same experiment was repeated in August 1987 in the locality, with the same results. It thus seems clear that it was not the baya which carried the *Xanthium* 'fruit' to the nest.

When the fruit of *Xanthium indicum* was seen for the first time in Alwar district, further attempts were made to discover the mysterious fruit carrying agency. A sampling survey was conducted from September 1988 to January 1989 in degraded forests and agricultural fields. In January, while I was collecting baya nests near the small village of Shyopur, the four year old question was answered – the culprit was the longtailed tree mouse *Vandeleuria oleracea*.

During the sampling survey, 13 nests of *Ploceus philippinus* were collected which had been 'parasitized' by the longtailed tree mouse. Three of the nests contained gnawed pieces of half eaten fruits of *Xanthium indicum*. The tree mice were physically present in seven nests including the three which contained *Xanthium* fruits. The remaining six nests contained mice nests inside, but their occupants were not present at the time of observation.

It was observed that fruits of *Xanthium indicum* are used as food during times of food scarcity. In Rajasthan the kharif crop is generally harvested from the end of October to mid November. At that time, grain remaining in fields and threshing floors serves as food. From December onwards, food scarcity grows and the longtailed tree mouse collects *Xanthium* fruits as an alternative source of food in those areas where *Xanthium* grows wild.

To confirm the food value of *Xanthium* fruits for the tree mouse, five mice were collected from baya nests and kept in a dark room in a cage in the second fortnight of January at World Forestry Arboretum, Jaipur. Four different types of items were given as food to the mice to see

TABLE 1
FOOD OFFERED TO CAPTIVE LONGTAILED TREE MICE

Food item	Remarks
Fruits of *Xanthium indicum*	*Extensively eaten.*
Wheat (Chapati)	Occasionally eaten.
Seeds of *Leucaena leucocephala*	Not eaten.
Leaves of *Portulacaria afra*	Occasionally eaten. Perhaps used as a source of water and salt.

their preference (Table 1). Water was not given. It was noticed that fruits of *Xanthium indicum* was their prime choice.

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19. SALTWATER CROCODILE *CROCODYLUS POROSUS* IN ANDHRA PRADESH

(With a text-figure)

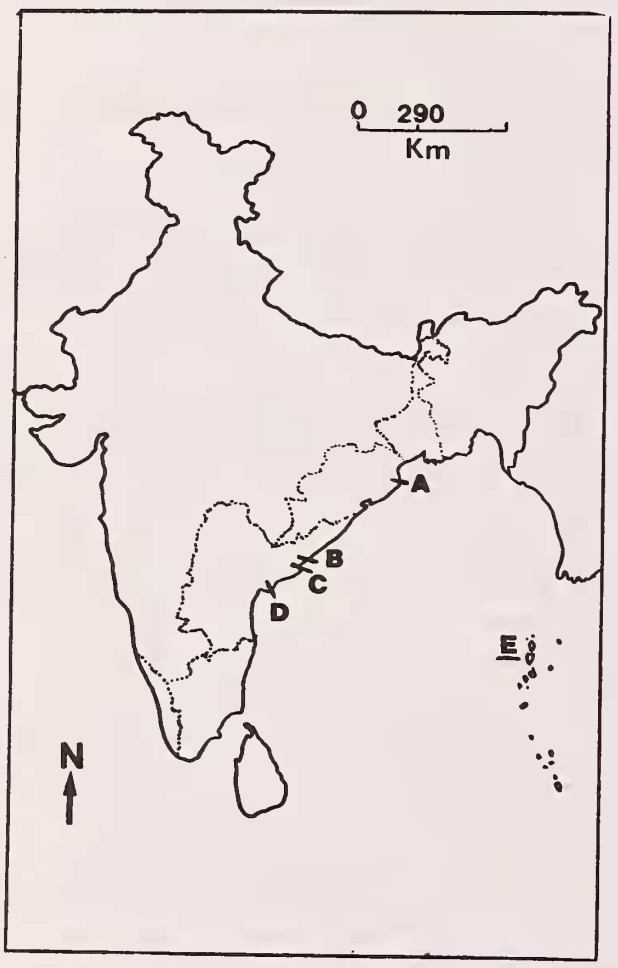

Fig. 1. Map of India showing capture points of saltwater crocodile. A . Gahirmatha beach, B. Capture point–1989 (this report), C. Coringa Wildlife Sanctuary, D. Capture point–1979 , E. Andaman islands.

On 18 January 1989 a juvenile saltwater crocodile *Crocodylus porosus* (1.5 m size) was caught in the sea by some fishermen near Moolapeta village, East Godavari District, Andhra Pradesh. The capture point was 25 km north of the Coringa Wildlife Sanctuary (Fig. 1). The crocodile was brought to the village, photographed and later taken possession of by the Andhra Pradesh Forest Department.

In India the species is present in Orissa and West Bengal in the mainland and in the Andaman and Nicobar Islands (Bustard and Choudhury 1980b, Kar 1981, Singh 1986). By 1975, the species was extinct in most of its former ranges in India including Kerala, Tamil Nadu and Andhra Pradesh (Bustard and Choudhury 1980b).

In 1978, a total of 3 saltwater crocodiles (1.2 m size) were released in the Coringa Wildlife Sanctuary (Godavari delta) (Bustard and Choudhury 1980b) as a part of the programme on crocodile rehabilitation. Unpublished reports revealed that these crocodiles were killed immediately by the local fishermen. There has been no further release in the Sanctuary since then. Bustard and Choudhury (1980a) reported that a 3.3 m saltwater crocodile caught in Krishna Estuary, Andhra Pradesh, on 11 January 1979 may have come from the Andamans (Fig. 1). Whitaker (1982) reported that a male *C. porosus* 2.8 m in length and 80 kg in weight was captured by fishermen in Karaikal, Tamil Nadu. He assumed that the crocodile might have come from Trincomalee on the east coast or Puttalam on the west coast of Sri Lanka, the nearest *porosus* populations to Tamil Nadu. He pointed out that saltwater crocodiles cross great gaps of sea between islands but coastal migrations are probably more frequent.

Kar and Rao (1985), while reporting the unusual sighting of a gharial *Gavialis gangeticus* on Gahirmatha beach (Fig. 1), stated that the sea currents on this coast are from south to north, which helped the gharial to move northwards. If this is true, then the saltwater crocodile caught off the Andhra coast at Moolapeta in January 1989 might have come from Andaman islands, travelling approximately 1100 km through open sea, an inference which is similar to the conclusion by Bustard and Choudhury (1980a). Both instances occurred during the month of January (1979 and 1989). The sea currents between Andamans and Andhra Pradesh during January may have helped the crocodiles to travel to the Andhra coast, and the possibility of the crocodile coming from Orissa and West